Natural Resource Concern	Description of Concern	Virginia Quality Criteria	Assessment Tools for Quality Criteria Evaluation	Measurement Unit
Air Quality - Particulate matter less than 10 micrometers in diameter (PM 10)	Particulate matter less than 10 micrometers in diameter are suspended in the air causing potential health hazards to humans and animals.	**SAME AS NATIONAL** Land use and management operations reduce PM-10 emissions into the atmosphere and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and Local regulations.	• Specific guidelines contained in State or Federal Implementation Plan; or other approved NRCS tool. • Air quality analysis	Pounds/Year **–** average annual pounds of reduced PM-10 emissions for the field or planning area/unit
Air Quality - Particulate matter less than 2.5 micrometers in diameter (PM 2.5)	Particulate matter less than 2.5 micrometers in diameter are suspended in the air causing potential health hazards to humans and animals.	**SAME AS NATIONAL** Land use and management operations reduce PM-2.5 emissions into the atmosphere and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and Local regulations.	• Specific guidelines contained in State or Federal Implementation Plan; or other approved NRCS tools	Pounds/Year **–** average annual pounds of reduced PM-2.5 emissions for the field or planning area/unit
Air Quality - Excessive Ozone	High concentrations of ozone (O_3) are adversely affecting human health, reducing plant yields, and leading to the creation of smog.	**SAME AS NATIONAL** Land use and management operations reduce ozone precursors and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and Local regulations.	• Specific guidelines contained in State or Federal Implementation Plan; or other approved NRCS tools	Pounds/Year **–** average annual pounds of reduced ozone precursors emissions for the field or planning area/unit
Air Quality - Excessive Greenhouse Gas – CO_2 (carbon dioxide)	Increased CO_2 concentrations are adversely affecting ecosystem processes.	**SAME AS NATIONAL** Land use and management operations reduce CO_2 emissions into the atmosphere and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and Local regulations.	• Model simulations (Century, EPIC, CQUESTER); sampling for soil carbon or International Panel on Climate Change methodology; or other NRCS approved tools • RUSLE2 SCI value	Non Measurable

Natural Resource Concern	Description of Concern	Virginia Quality Criteria	Assessment Tools for Quality Criteria Evaluation	Measurement Unit
Air Quality - Excessive Greenhouse Gas – N_2O (nitrous oxide)	Increased N_2O concentrations are adversely affecting ecosystem processes.	**SAME AS NATIONAL** Land use and management operations reduce NO_2 emissions into the atmosphere and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and Local regulations.	• Model simulations (NLEAP or DayCENT), or IPCC methodology; or other NRCS approved tools	Non Measurable
Air Quality - Excessive Greenhouse Gas – CH_4 (methane)	Increased CH4 concentrations are adversely affecting ecosystem processes.	**SAME AS NATIONAL** Land use and management operations reduce CH_4 emissions into the atmosphere and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and Local regulations.	• IPCC methodology; or other NRCS approved tools	Non Measurable
Air Quality - Ammonia (NH_3)	Animal waste and inorganic commercial fertilizers emit ammonia that contributes to odor, is a PM2.5 precursor, and contributes to acid rain.	**SAME AS NATIONAL** Land use and management operations reduce NH_3 emissions into the atmosphere and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and Local regulations.	• Approved NRCS technical guidance and tools • Olfactory Assessment	Pounds/Year **–** average annual pounds of reduced NH3 emissions for the field or planning area/unit
Air Quality - Chemical Drift	Materials applied for pest control drift downwind and contaminate/injure non-targeted fields, crops, soils, water, animals and humans.	**SAME AS NATIONAL** Land use and management operations reduce chemical drift into the atmosphere and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and Local regulations.	• Approved NRCS technical guidance and tools • Virginia Pest Management Worksheet • Application according to label	Non Measurable

Natural Resource Concern	Description of Concern	Virginia Quality Criteria	Assessment Tools for Quality Criteria Evaluation	Measurement Unit
Air Quality - Objectionable Odors	Land use and management operations produce offensive smells.	**SAME AS NATIONAL** Odor-producing facilities and activities are planned and sited to mitigate potential nuisance impacts and meets all applicable Tribal, State, and Local regulations.	• Olfactory assessment • Agricultural Waste Management Field Handbook (AWMFH) • NRCS approved tools	Non Measurable
Air Quality - Reduced Visibility	Sight distance is impaired due to airborne particles causing unsafe conditions and impeded viewing of natural vistas especially in Class I viewing areas (primarily national parks and monuments).	**SAME AS NATIONAL** Land use and management operations reduce particle emissions into the atmosphere and comply with all applicable Federal, Tribal, State, and Local regulations including state and local smoke and/or burn management plans, including State and local smoke and /or burn management plans.	• Visual assessment • Regional air partnership recommendations and/or state guidance for smoke management • Prescribed Burning Plan	Non Measurable
Air Quality - Undesirable Air Movement	Wind velocities (too little or too much) reduce animal or plant productivity, impact human comfort and increase energy consumption.	**SAME AS NATIONAL** Land use and management operations mitigate excessive or deficient air movement.	• Visual assessment • Anemometers • Approved NRCS technical guidance and tools	Non Measurable
Air Quality - Adverse Air Temperature	Air temperatures (too cold or too hot) reduce animal or plant productivity, impact human comfort and increase energy consumption.	**SAME AS NATIONAL** Land use and management operations mitigate temperature extremes.	• Chill factor indices; heat indices • Air temperature assessment	Non Measurable